

DK IB collection: Middle Years Programme (MYP I-3)

Supporting transdisciplinary understanding, inquiry and international mindedness



## **Note to MYP educators**

DK's nonfiction, highly illustrated books are filled with expert, thorough, and fact-filled writing. Topics span extensive historical coverage to contemporary global issues such as climate change and the global pandemic. The content is accessible, enjoyable to read, and designed with young readers in mind through pages that clearly chunk information into different visual elements, including full-colour illustrations and maps, detailed timelines, inspirational quotes, famous people profiles, further research sections, directories, glossaries, and more.

DK's goal is to support IB teachers by mapping their existing content to the aims and objectives specific to the MYP curriculum to support teaching and learning. This collection is intended as supplementary materials in MYP schools and can be used in a variety of ways by creative teachers and inquisitive students on the lookout for quality resources. The following is only a small list of the ways in which teachers can use these resources with their students:

- Specific disciplinary reference material
- Transdisciplinary and interdisciplinary resources (IDUs)
- Suggested reading for students seeking topics for Community Projects
- Suggested reading for exam review and assignments
- Encouragement of student agency through creative and critical thinking
- Encouragement of conceptual and contextual thinking
- Encouragement of independent student growth in approaches to learning (ATLs) and the learner profile
- Opportunities to foster international-mindedness

#### Note to librarians

This DK collection is meant as a supplement to schools' existing MYP curriculums. The collection can be kept in the library or shared out to individual subject teachers. Here are just a few ways librarians can encourage the collection's use to support MYP students and teachers:

- Use during library lessons with students
- Make available to students for independent reading and research
- Suggest for lessons when co-planning with subject teachers
- Share with individual departments
- Inform parents on the library website or the blog, and/or in the school newsletter

### **How the collection benefits MYP students**

The MYP years are a time of discovery for students to learn about all the core subjects from which they will go on to choose their secondary courses. Wide-ranging exposure to curriculum materials is therefore important for students to have a good understanding of what each course involves. The MYP also encourages students to foster a mindset embracing inquiry, transdisciplinary understanding, and international-mindedness, which the books in this collection have been chosen to support.

The following list suggests ways DK books can help students in MYP courses:

- Brainstorming suitable topics for inquiry-based work
- Researching personal areas of interest for Community Projects
- Independently preparing class projects and presentations
- Extra home learning for deeper and wider subject understanding



## How the collection supports MYP aims and objectives

This collection of books has been curated as supplementary materials around the eight MYP subject groups to support and enhance schools' existing MYP curriculums. Tasks are designed for independent and supplementary student work and incorporate MYP core principles.

Visible thinking tasks (many based on <u>Project Zero Harvard Graduate School of Education</u>) are used in line with the MYP values of fostering student agency. Activities allow students to explore their preferred learning styles while fostering independent study skills that they can apply across all subjects. The "action–inquiry–reflection" MYP learning cycle is also emphasized to reinforce the development of students as lifelong, independent learners.

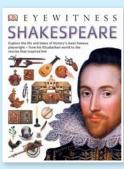
Books in the collection have been matched to core MYP disciplines with suggestions for how students and teachers can incorporate links to ATLs and the learner profile attributes, subject-specific assessment criteria, global contexts, and related concepts.



### Language and literature

#### **DK Eyewitness: Shakespeare**

This book has detailed facts on everything students need to know about William Shakespeare's life and times, including his biography, Elizabethan society, the theatre, and Shakespeare's plays.





## Myths, Legends & Sacred Stories: A Children's Encyclopedia

This book supports internationalmindedness through its wideranging selection of world myths from Europe, Asia, Africa, the Americas, and Oceania. It supports student inquiry and research into



the global contexts of orientation in space and time, and personal and cultural expression.





Ask students to complete **Inquiry task 1: 3-2-1 graphic organizer** and **Inquiry task 2: STEAL** a character.

#### **Individuals and societies**

#### History: Year by Year

With content ranging from before history even began through to the 21st century, students can use *History Year by Year* to help them understand global contexts such as the orientation in space and time of historical events, scientific and technical innovation through the ages, and even fairness and development.

#### Our World in Pictures: Countries, Cultures, People & Places

This book will promote international-mindedness and children's curiosity through its visually engaging exploration of every country around the globe. Students can connect their reading to the global contexts of identities and relationships, orientation in space and time, and personal and cultural expression.

#### What's Where on Earth?

What's Where on Earth? supports transdisciplinary teaching and learning by combining subjects such as geography, biology, design, history, and cultural studies. Students will appreciate several global contexts, including globalization and sustainability, orientation in space and time, and scientific and technical innovation.

Ask students to complete **Inquiry task 3: Map your life** and **Inquiry task 4: KWHL chart**.

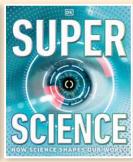


## **Sciences**

#### What's the Point of Science?

This book takes a transdisciplinary approach to sciences and includes chapters on biology, physics, chemistry, earth science, and space science. What's the Point of Science? encourages young readers to think about global contexts such as scientific and technical innovation, and fairness and development, and to appreciate how science is used in our everyday lives.





#### **Super Science: How Science Shapes Our World**

Super Science is a detailed and up-to-date book on several different areas where science is applied in our larger world, such as how we build, travel, grow food, fight illness, and keep discovering more. It highlights the global context of scientific and technical innovation.

Ask students to complete **Inquiry task 5: Connect, extend, challenge**.

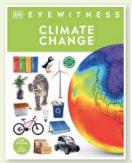
## Climate change

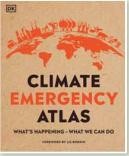
#### **Climate Change**

With up-to-date and timely information, *Climate Change* will teach students about how the climate is changing and the impact that this is having on people, nature, and the world.

#### **Climate Emergency Atlas**

This book features a range of visually engaging, detailed maps to illustrate the global scale of climate change and the interconnectedness of the world.





Both books can support international-mindedness in students and teach them to think about solutions while they explore global contexts, such as fairness and development, globalization and sustainability, and scientific and technical innovation. These books might also be helpful in inspiring students who want to get involved in climate community service and action projects.

Ask students to complete **Inquiry task 6: Unveiling stories**.

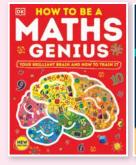
## **Mathematics**

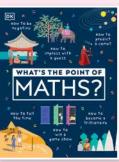
#### How to be a Maths Genius

The colourful illustrations and clear explanations in this book will engage young readers while they practise activities, puzzles, and games.

#### What's the Point of Maths?

This book works well with *How to be a Maths Genius* because *What's the Point of Maths?* explains the everyday impact that maths has in our lives and the world around us.





Ask students to complete Inquiry task 7: Think, puzzle, extend.



### **The Arts**

#### Art: A Children's Encyclopedia

This encyclopedia will teach children about paintings, sculptures, and photography over time and around the world, through beautiful imagery and concise explanations. It can help students appreciate global contexts such as personal and cultural expression, orientation in space and time, and identities and relationships.

Ask students to complete
Inquiry task 8: Colours,
shapes, lines and Inquiry
task 9: Perceive, know
about, care about.

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## Design

#### **How Super Cool Tech Works**

This book will encourage creative and critical thinking in students interested in design and technology, as they explore the inner workings of things we play with, move, and construct. The book also explores power sources, how we live, and the future of technology, and can support global contexts such as scientific and technical innovation, and orientation in space and time.

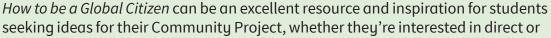


HOW TO BE A

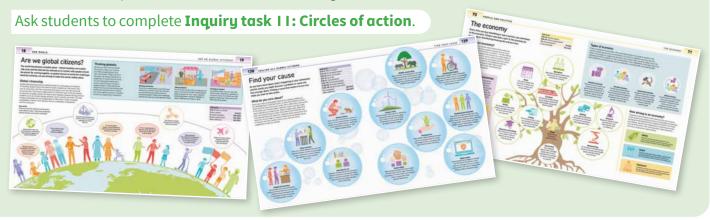
## Community Project

#### How to be a Global Citizen

This book is filled with information to inspire students to empathize with others, be changemakers, and create bonds with their communities. It explores important and contemporary issues, such as women's rights, sexual and gender identity, healthcare, political representation, sustainable living, and fake news.



indirect service, advocacy, or research. The topics covered here will also encourage student reflection on mindfulness, perseverance, emotional management, self-motivation, and resilience.



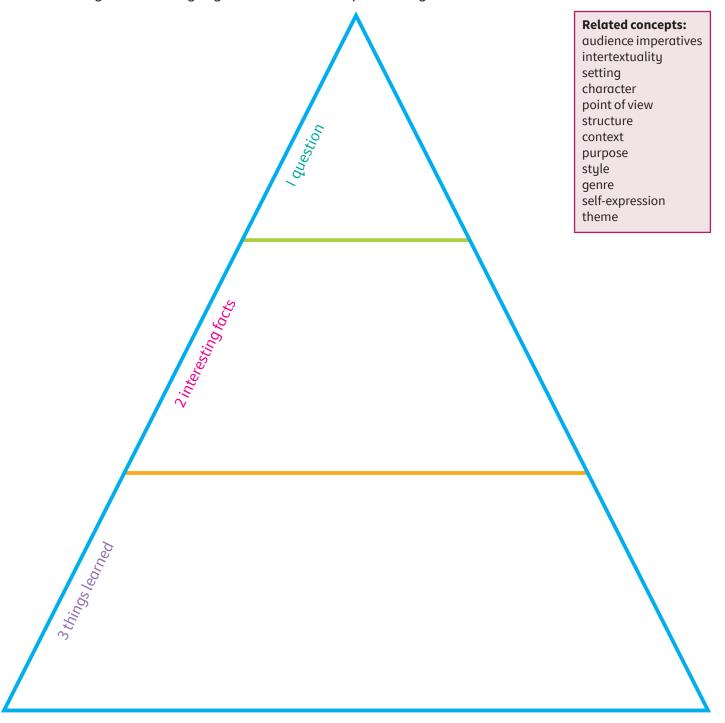


**ACTION** 

What Shakespearean or world myth topics are you studying in class (language, arts or other), or have you a personal interest in? Use the table of contents and indexes in *DK Eyewitness: Shakespeare* and *Myths*, *Legends & Sacred Stories: A Children's Encyclopedia* to find and read about these topics.

## Inquiry task 1: 3-2-1 graphic organizer

Use the pyramid to organize the ideas you've learned about. Write down three new things you learned (bottom), two interesting facts (middle), and one question (top) you still have for further inquiry. Try to use the vocabulary from the language arts related concepts box in your notes.





#### Language and literature

## Inquiry task 2: STEAL a character

The acronym "STEAL" can be used to analyze any character, real or fictional, in the stories you read, or used to create your own characters for stories you are writing. For this task, choose either a Shakespeare character or a character you read about in a myth. Use your critical thinking skills to add information to the chart after reading about them.

Copy the chart and complete each column with the character's name, an example of each trait from your reading, and your thoughts on how this trait develops the character for the reader. Remember to use the related concepts vocabulary (see Inquiry task I) to help you with ideas.

**S** stands for **speech** – fast or slow? quiet or talkative? pet phrases?

Tstands for **thoughts** – are they the same or different to what they say?

Estands for effects on others – do they have good or bad relationships?

A stands for **actions** – active or lazy? healthy or ill? helpful or harmful?

L stands for **looks** – what does their physical appearance say about who they are?

Character trait	Example from reading	How does this trait develop the character for the reader?
<b>S</b> – character's speech		
<b>T</b> – character's thoughts		
<b>E</b> – character's effect on others		
<b>A</b> – character's actions		
L – character's looks		

ATL reflection: How can these methods encourage you to think critically
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**Learner profile attributes:** knowledgeable, thinker

MYP assessment help: analyzing, organizing



Individuals and societies ACTION

Look through *Our World in Pictures: Countries, Cultures, People & Places* and *What's Where on Earth?* to find information about countries you're personally connected to or have experience with. Use the maps on the inside front covers of both books to find these countries and to locate yourself in the world. Use these maps to help you find the countries you are connected to and to complete Inquiry task 3.

## Inquiry task 3: Map your life

- Use three different colours to label the map to show:
  - countries you've lived in
  - countries you've visited
  - countries that you have cultural roots in
- 2 How would you describe your global connections?

#### **Related concepts:**

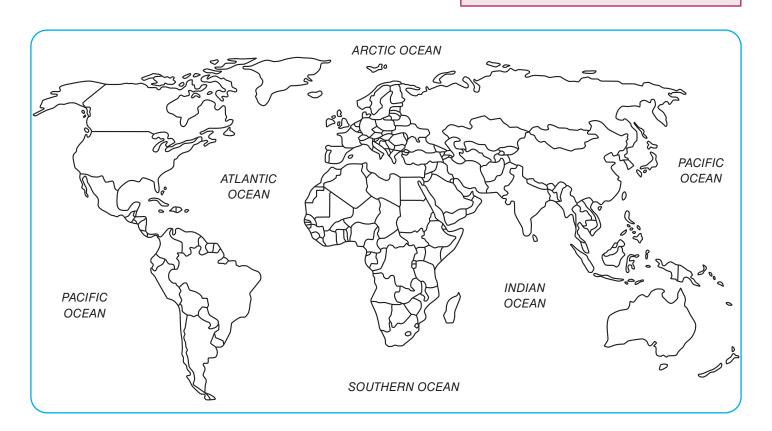
causality (cause and consequence)

choice culture equity globalization

identity innovation and revolution

perspective power processes resources

sustainability



**ATL reflection:** How can your personal history help you be curious about other people?

**Learner profile attributes:** knowledgeable, inquirer

MYP assessment help: knowing and understanding, investigating



Individuals and societies ACTION

Identify a historical period that you are studying in class, you have an assignment on, or you have a personal interest in. Use the table of contents and index in *History: Year by Year* to find chapters about this period. Notice how information is organized for the reader into sections such as timelines, images and captions, and coloured profile boxes.

## **Inquiry task 4: KWHL chart**

Copy and use the KWHL chart to take notes and organize your thinking before, during, and after reading. Use the related concepts to help you with ideas and vocabulary.

- K stands for what you already know about a subject.
- **W** stands for what you **want** to learn.
- **H** stands for **how** you can figure out ways to learn more about the topic.
- L stands for what you learn as you research.

#### **Related concepts:**

causality (cause and consequence)

choice culture equity globalization

identity innovation and revolution

perspective power processes resources

sustainability

K	w	н	L

**ATL reflection:** How can your personal history help you be curious about other people?

Learner profile attributes: knowledgeable, inquirer

MYP assessment help: knowing and understanding, investigating



Sciences

What unit are you studying in science class? Find your topic in the table of contents of *What's the Point of Science?* or *Super Science: How Science Shapes Our World* and read about it. Use the headings on each page to help you remember key ideas.

## Inquiry task 5: Connect, extend, challenge

Think about what you read in What's the Point of Science? or Super Science: How Science Shapes Our World. Use the related concepts for help with vocabulary and ideas. Then answer the questions in the chart.

# Related concepts (for integrated and modular science courses):balanceconsequencesenergyenvironmentevidenceformfunctioninteractionmodelsmovementpatternstransformation

Inquire	Think about	Your answer
Connect	What did you already know about this topic?	
Extend	What new things did you learn from your reading?	
Challenge	What questions do you still have?	

**ATL reflection:** How has this task made you think more about the ways in which science plays an important role in your own life?

**Learner profile attributes:** thinker, open-minded

MYP assessment help: knowing and understanding, processing and evaluating



Climate change ACTION

Climate change is an issue that has an impact on multiple layers of the world, including people, plants, animals, weather, air, water, and geography. Read as much as you can about your topic to get a broad perspective of it. Use the table of contents in *Climate Change* and the *Climate Emergency Atlas* to find topics (for example, disappearing forests, fast fashion, animals in danger, melting ice, and so on). Be sure to look through both books as they present information in different ways.

## **Inquiry task 6: Unveiling stories**

By thinking in terms of what the "story" is, our minds often find it easier to understand and empathize with others. Copy and complete this chart, starting with your topic in the centre. Fill in the surrounding sections with information about what each group is experiencing.

- Your story: What is your story? How has this topic affected you personally?
- Nature's story: What is nature's story? What parts of nature have been impacted?
- **Animals' story:** What is the animals' story? Which ones are affected?

**Learner profile attributes:** thinker, caring

- World story: What is the world story? On a global level, how has this affected us all?
- Future generations' story: What is the future story? How might future generations look back on this?
- Story of your choice: What additional story of your choice would you like to add to the circle?



**DK Learning** 

**ATL reflection:** How did this activity help you better appreciate global issues?

**MYP assessment help:** communicating, reflecting

Mathematics ACTION

Which areas of maths do you either enjoy or find difficult and want to get more practise in? Find your topic in *How to be a Maths Genius* and practise your skills with the activities, puzzles, and games. Answers are in the back of the book.

Reinforce your maths knowledge by reading more about the concepts of personal interest to you in *How to be a Maths Genius* and *What's the Point of Maths?* 

## Inquiry task 7: Think, puzzle, extend

After completing one or both of the above actions, record your thoughts in the chart below by answering the three "Think about" questions. Use the vocabulary of the related mathematical concepts for help with expressing your ideas.

#### **Related concepts:**

approximation equivalence models quantity simplification systems change generalization patterns representation space validity

Inquire	Think about	Your answer
Think	What do you think you already know about this topic?	
Puzzle	What <b>puzzles</b> you about this topic? What questions do you still have?	
Explore	What would you like to <b>explore</b> further about this topic, and how can you do this?	

**ATL reflection:** How did this method help you think about maths in new ways?

Learner profile attributes: self-management, thinker

MYP assessment help: knowing and understanding; communicating



The Arts ACTION

Use the table of contents and index in *Art: A Children's Encyclopedia* to find a topic you're interested in learning more about. Read and pay particular attention to the chapter's headings to help you remember key ideas.

## **Inquiry task 8: Colours, shapes, lines**

Гh	is routine will help improve your powers of observation and your critical			
:hi	inking skills by paying close attention to detail. Test it out on an image of your	Related concepts: audience innovation		
ch	oice from <i>Art: A Children's Encyclopedia</i> , and then try using it in class.	style	boundaries	
	ok closely at your image and answer these questions. Remember to be	genre	representation	
cre	eative in your descriptive choices.	expression presentation	interpretation composition	
	What colours do you see?	narrative	visual culture	
2	What shapes do you see?			
3	What lines do you see?			
	Inquiry task 9: Perceive, know about, c	are about		
Js	e your imagination to think creatively about the person or object in your ch	osen artwork. H	low would uou	
	swer these questions to get inside their perspective and try to understand the		_	
	e vocabulary from the visual arts related concepts for help.			
	What can the person (or thing) in the picture <b>perceive</b> (with their senses)?			
2	What might the person (or thing) <b>know about</b> or believe? Give evidence.			
3	What might the person (or thing) <b>care about</b> ? Give reasons.			
	ATL reflection: How does this type of creative thinking about art help you to app by the artist to depict the scene in the way that they did		s made	



MYP assessment help: thinking creatively, responding

**Learner profile attributes:** inquirer, open-minded

Design

Use the table of contents and index in *How Super Cool Tech Works* to find topics to research for class assignments, science fairs, or personal interest. Use the glossary as you read for help with new vocabulary. Also look for links to the related concepts.

## **Inquiry task 10: PMI chart**

**Related concepts:** 

adaptation collaboration ergonomics evaluation form function innovation invention markets and trends perspective resources sustainability

Record your thoughts by taking notes on the positive, negative, and interesting aspects of the technology you chose to read about.

**P = Positive:** What were the good things (helpful points, advantages) that you noticed?

**M = Minus:** What minuses did the technology have? What didn't you like about it?

**I = Interesting:** What did you find interesting about it (but not necessarily good or bad)?

Technology I read about:		
Р	М	I

**ATL reflection:** How did this method help you use different sides to a topic to decide your opinion of it?

**Learner profile attributes:** open-minded, balanced

MYP assessment help: inquiring and analyzing, evaluating



Community Project ACTION

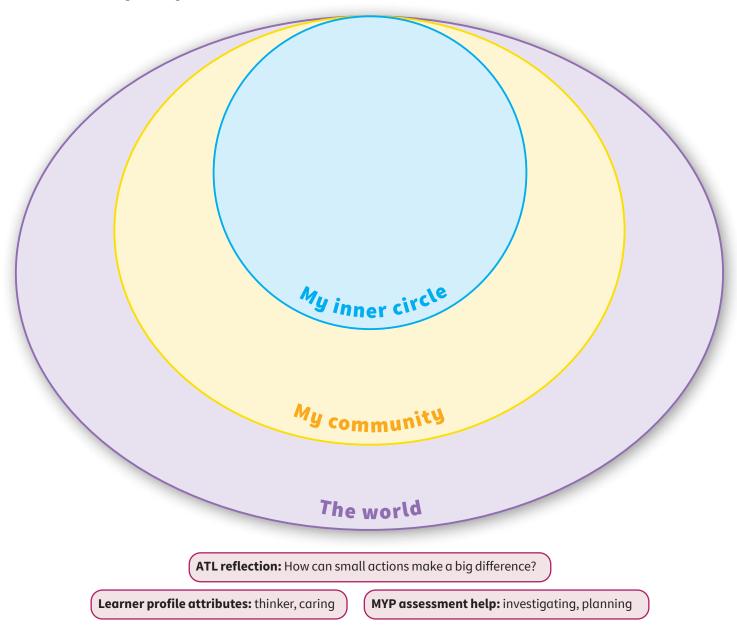
Use your school's resources to read about the Community Project and its objectives. Take some time to look through *How to be a Global Citizen* and inform yourself on topics of personal interest. Be on the lookout for needs in your own communities (local or global). Keep an open mind and take notes of ideas you want to return to.

## Inquiry task II: Circles of action

Complete this activity for as many topics as you want as a brainstorming tool to help you narrow down ideas for your Community Project. Copy the circle diagram and fill in this information.

What can I contribute to:

- my inner circle (friends, family, people I know)?
- my community (school, neighbourhood)?
- the world (beyond my immediate environment)?







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